

BGWSF
1.4

PRELIMINARY UPLAND ASSESSMENT REPORT
MCCONKEY/SESKO SITE
1725 PENNSYLVANIA AVENUE
BREMERTON, WASHINGTON

OCTOBER 26, 2007

FOR
CITY OF BREMERTON



W:\SEATTLE\PROJECTS\10892017\00\CAD\089201700-FIGURES.DWG\TAB.F3 MODIFIED BY BKARN ON SEP 20, 2007 - 14:22

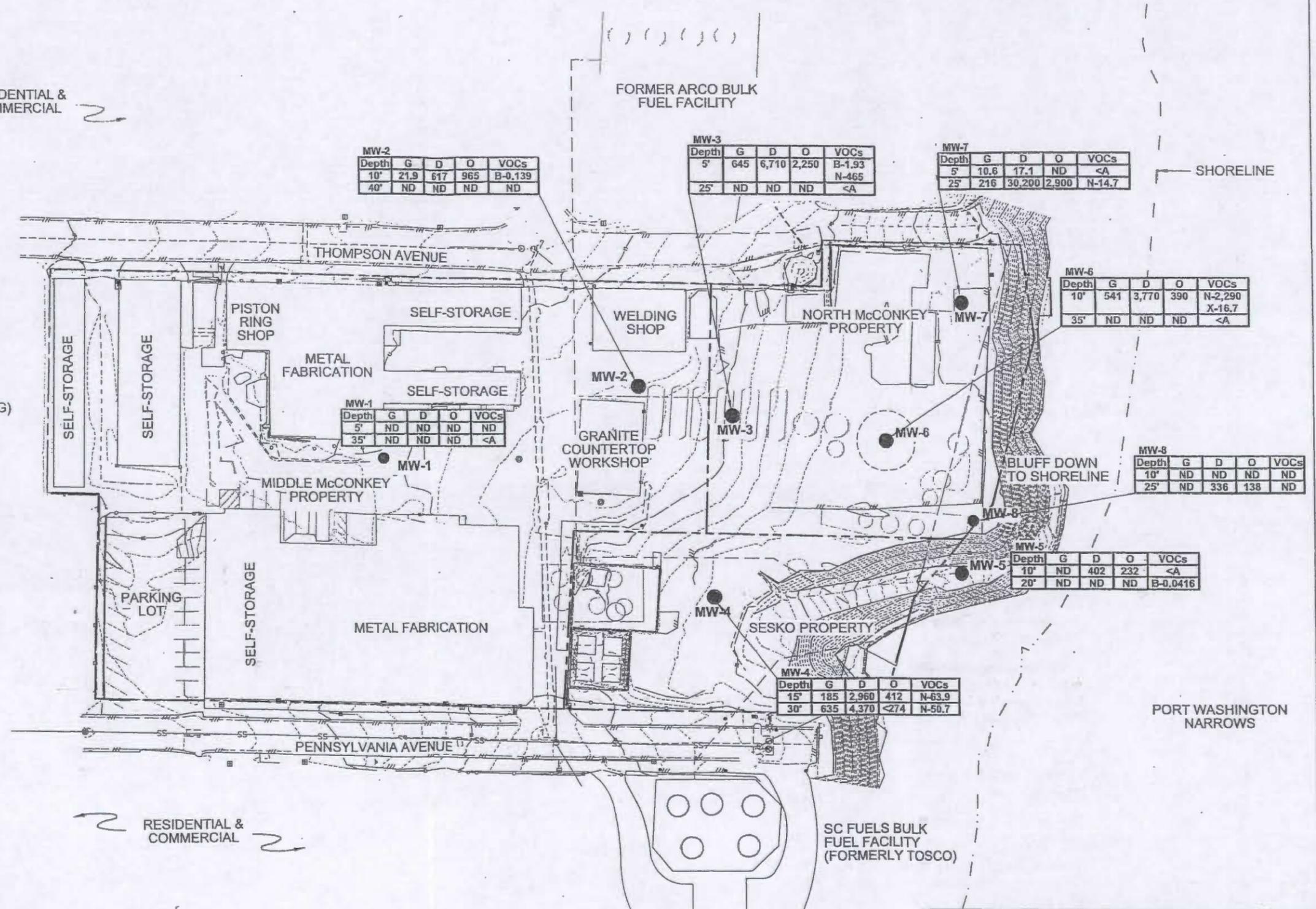
Legend:

- Site Boundary
 - MW-1 ● Monitoring Well Location
 - G = Gasoline Range Hydrocarbons
 - D = Diesel Range Hydrocarbons
 - O = Oil Range Hydrocarbons
 - VOCs = Volatile Organic Compounds
 - B = Benzene
 - N = Naphthalene
 - ND = Not Detected
 - <A = Less than MTCA Method A Clean-up Level
 - Exceeds MTCA Cleanup Level for one or more constituents
- The reported concentrations are in mg/kg.

Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base drawing provided by Parametrix (May 2007) and historic features provided by ECI and Techlaw, untitled and undated.



Depth	G	D	O	VOCs
10'	21.9	617	965	B-0.139
40'	ND	ND	ND	ND

Depth	G	D	O	VOCs
5'	645	6,710	2,250	B-1.93 N-465
25'	ND	ND	ND	<A

Depth	G	D	O	VOCs
5'	10.6	17.1	ND	<A
25'	216	30,200	2,900	N-14.7

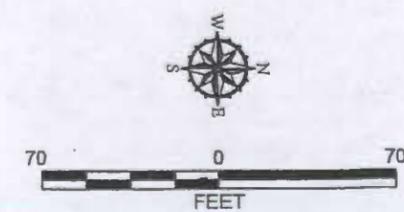
Depth	G	D	O	VOCs
10'	541	3,770	390	N-2,290 X-16.7
35'	ND	ND	ND	<A

Depth	G	D	O	VOCs
5'	ND	ND	ND	ND
35'	ND	ND	ND	<A

Depth	G	D	O	VOCs
10'	ND	ND	ND	ND
25'	ND	336	138	ND

Depth	G	D	O	VOCs
15'	185	2,960	412	N-63.9
30'	635	4,370	<274	N-50.7

Depth	G	D	O	VOCs
10'	ND	402	232	<A
20'	ND	ND	ND	B-0.0416



Summary of Petroleum Hydrocarbon and VOC Data for Soil	
McConkey/Sesko Site Bremerton, Washington	
GEOENGINEERS	Figure 3

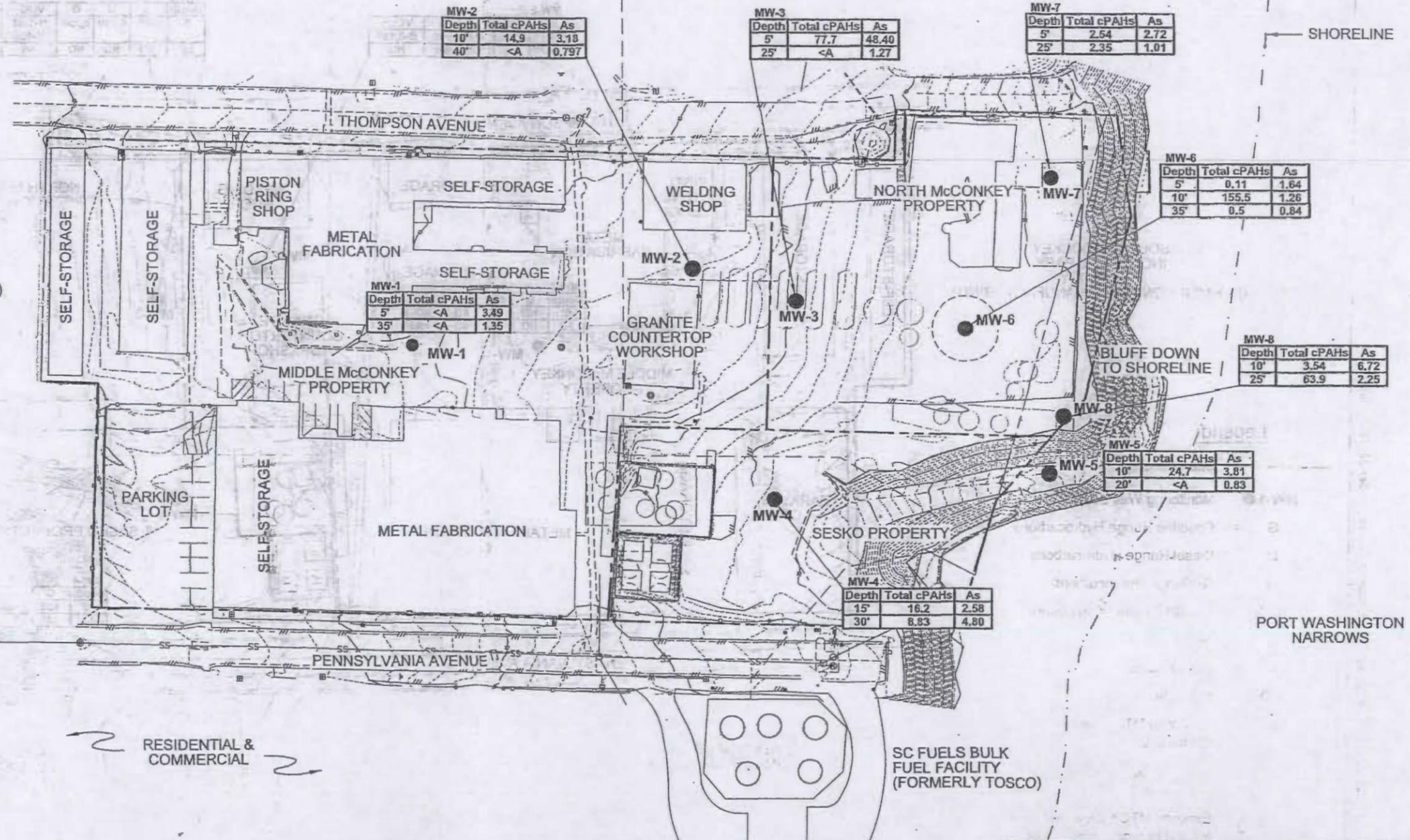
W:\SEATTLE\PROJECTS\010892017\001\CAD\089201700-FIGURES.dwg (TAB:4, MODIFIED BY BKARR ON SEP 20, 2007 - 14:22)

RESIDENTIAL & COMMERCIAL

FORMER ARCO BULK FUEL FACILITY

SHORELINE

SOUTH McCONKEY INDUSTRIAL PARK PROPERTY (FORMER CONCRETE MANUFACTURING)



MW-2

Depth	Total cPAHs	As
10'	14.9	3.18
40'	<A	0.797

MW-3

Depth	Total cPAHs	As
5'	77.7	48.40
25'	<A	1.27

MW-7

Depth	Total cPAHs	As
5'	2.54	2.72
25'	2.35	1.01

MW-6

Depth	Total cPAHs	As
5'	0.11	1.64
10'	155.5	1.26
35'	0.5	0.84

MW-1

Depth	Total cPAHs	As
5'	<A	3.49
35'	<A	1.35

MW-8

Depth	Total cPAHs	As
10'	3.54	6.72
25'	63.9	2.25

MW-5

Depth	Total cPAHs	As
10'	24.7	3.81
20'	<A	0.83

MW-4

Depth	Total cPAHs	As
15'	16.2	2.58
30'	8.83	4.80

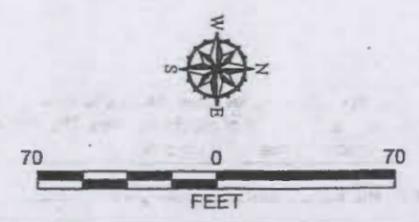
Legend:

- Site Boundary
- MW-1 ● Monitoring Well Location
- Total cPAHs = Total Carcinogenic Polycyclic Aromatic Hydrocarbons
- Total cPAHs calculated using toxic equivalent (TEQ) relative to benzo(a)pyrene per WAC173-340-780(8).
- As = Arsenic
- <A = Less than MTCA Method A Clean-up Level
- The reported concentrations are in mg/kg.
- Exceeds MTCA Cleanup Level for one or more constituents

Notes:

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Summary of cPAH and Arsenic Data for Soil	
McConkey/Sesko Site Bremerton, Washington	
GEOENGINEERS	Figure 4

W:\SEATTLE\PROJECTS\010892017\001\CAD\089201700-FIGURES.DWG\TAB\F5 MODIFIED BY BNARK ON SEP 20, 2007 - 14:22

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FORMER ARCO BULK FUEL FACILITY

SOUTH McCONKEY INDUSTRIAL PARK PROPERTY (FORMER CONCRETE MANUFACTURING)

Legend:

- Site Boundary
- MW-1 ● Monitoring Well Location
- G = Gasoline Range Hydrocarbons
- D = Diesel Range Hydrocarbons
- O = Oil Range Hydrocarbons
- CT = Carbon Tetrachloride
- VOCs = Volatile Organic Compounds
- B = Benzene
- N = Naphthalene
- ND = Not Detected
- <A = Less than MTCA Method A Clean-up Level

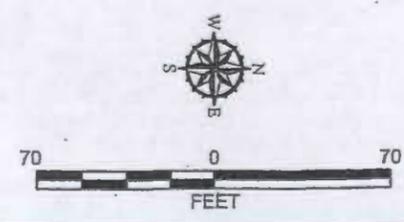
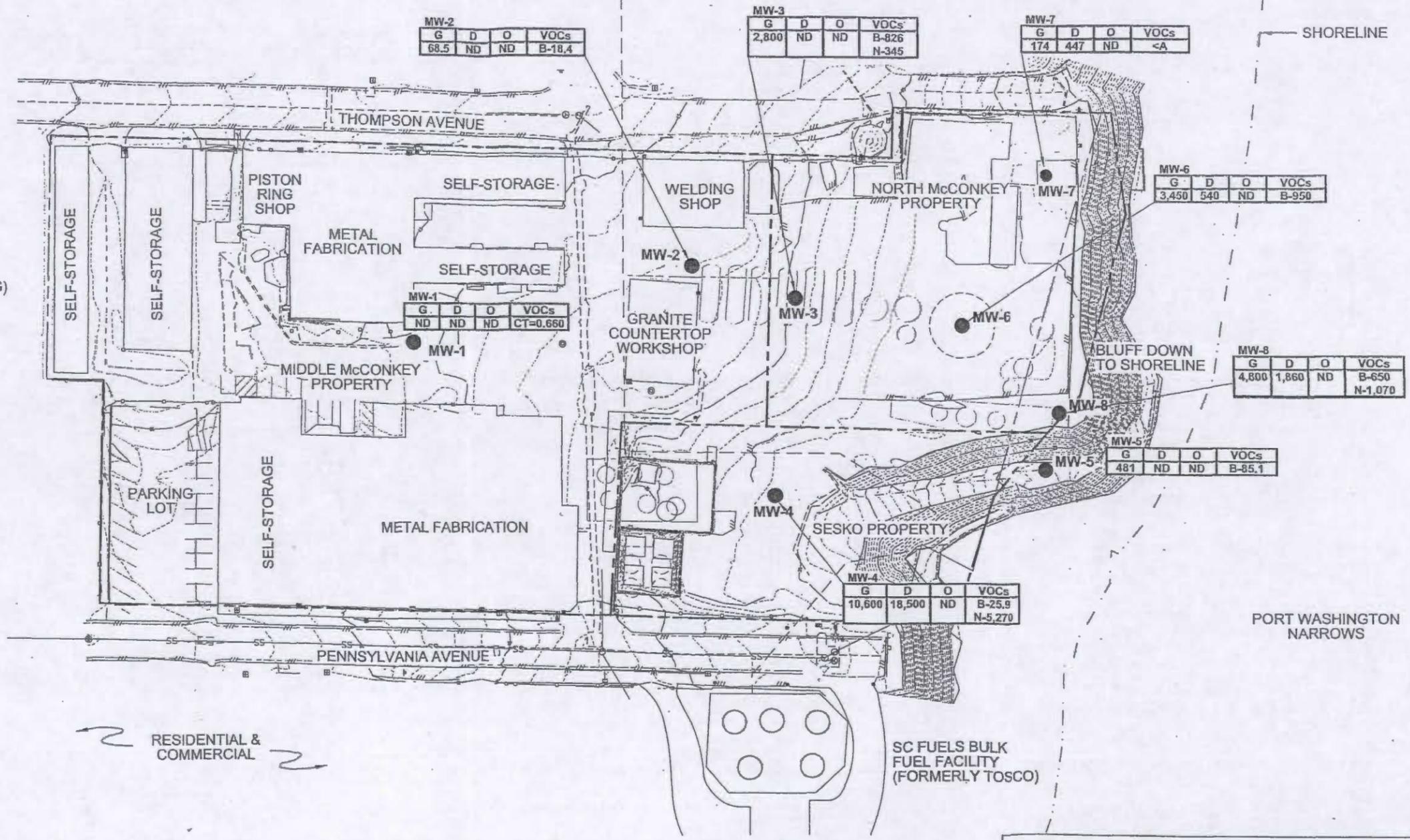
The reported concentrations are in µg/L.

- Exceeds MTCA Cleanup Level for hydrocarbons
- Exceeds MTCA Cleanup Level for carbon tetrachloride

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Summary of Petroleum Hydrocarbon and VOC Data for Groundwater	
McConkey/Sesko Site Bremerton, Washington	
GEOENGINEERS	Figure 5

W:\SEATTLE\PROJECTS\10892017\1001\CAD\1089201700-FIGURES.DWG\TAB\F6 MODIFIED BY BKARN ON SEP 20, 2007 - 14:23

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FORMER ARCO BULK FUEL FACILITY

SHORELINE

SOUTH McCONKEY INDUSTRIAL PARK PROPERTY (FORMER CONCRETE MANUFACTURING)

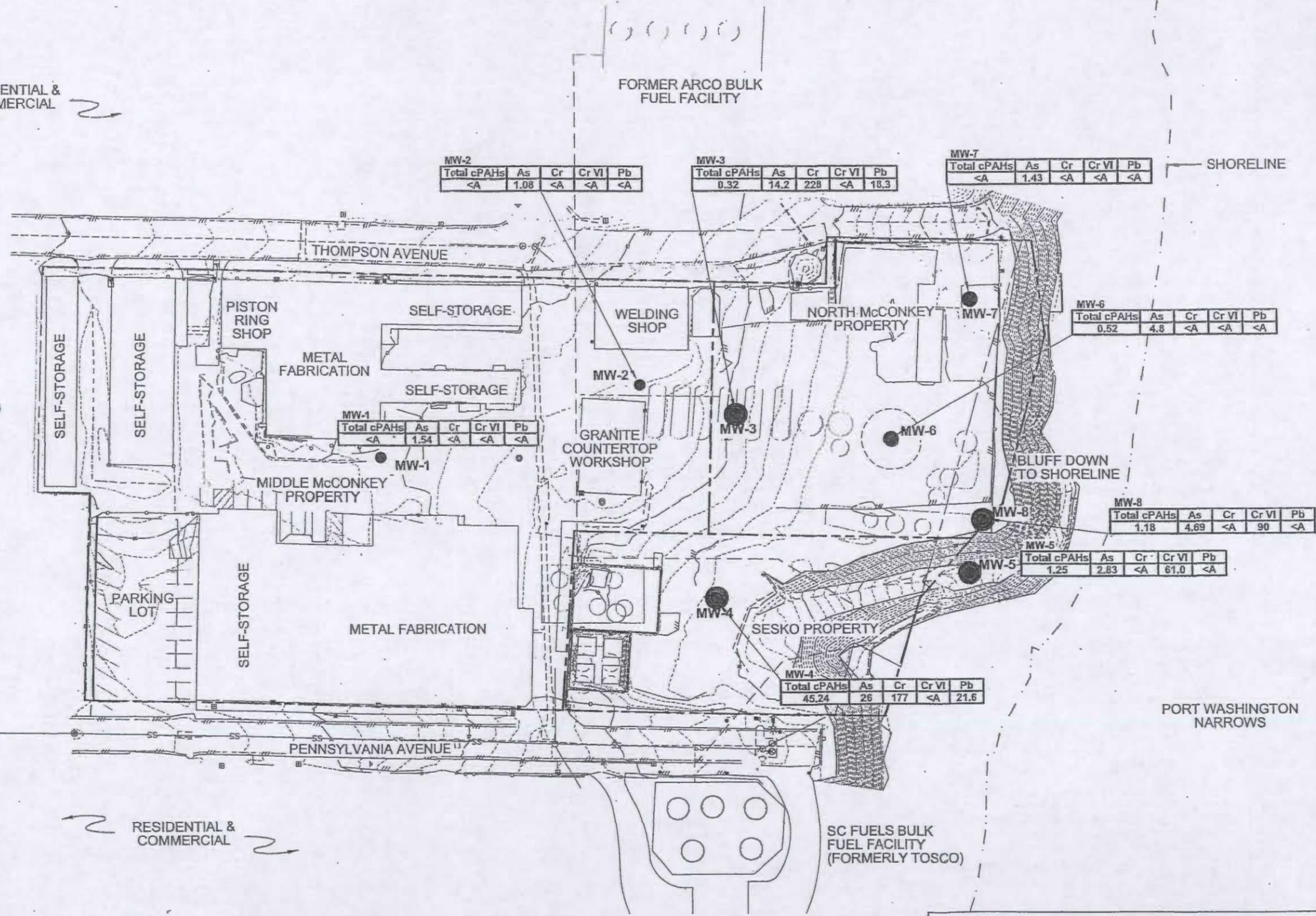
Legend:

- Site Boundary
- MW-1 ● Monitoring Well Location
- Total cPAHs = Total Carcinogenic Polycyclic Aromatic Hydrocarbons
- Total cPAHs calculated using toxic equivalent (TEQ) relative to benzo(a)pyrene per WAC173-340-780(8).
- As = Arsenic
- <A = Less than MTCA Method A Clean-up Level
- The reported concentrations are in µg/L.
- Cr = Chromium
- Cr VI = Hexavalent Chromium
- Pb = Lead
- Exceeds MTCA Cleanup Level for metals
- Exceeds MTCA Cleanup Level for CPAHs

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MW-2	Total cPAHs	As	Cr	Cr VI	Pb
	<A	1.08	<A	<A	<A

MW-3	Total cPAHs	As	Cr	Cr VI	Pb
	0.32	14.2	228	<A	18.3

MW-7	Total cPAHs	As	Cr	Cr VI	Pb
	<A	1.43	<A	<A	<A

MW-1	Total cPAHs	As	Cr	Cr VI	Pb
	<A	1.54	<A	<A	<A

MW-6	Total cPAHs	As	Cr	Cr VI	Pb
	0.52	4.8	<A	<A	<A

MW-8	Total cPAHs	As	Cr	Cr VI	Pb
	1.18	4.69	<A	90	<A

MW-5	Total cPAHs	As	Cr	Cr VI	Pb
	1.25	2.83	<A	61.0	<A

MW-4	Total cPAHs	As	Cr	Cr VI	Pb
	45.24	26	177	<A	21.6

Summary of cPAH and Dissolved Metals Data for Groundwater	
McConkey/Sesko Site Bremerton, Washington	
GEOENGINEERS	Figure 6

